



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/538,984

06/14/2005

Timothy Daniel Shaffer

2003B133

7501

23455 7590 02/27/2007
EXXONMOBIL CHEMICAL COMPANY
5200 BAYWAY DRIVE
P.O. BOX 2149
BAYTOWN, TX 77522-2149

EXAMINER

TESKIN, FRED M

ART UNIT

PAPER NUMBER

1713

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
--	-----------	---------------

3 MONTHS

02/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/538,984

Applicant(s)

SHAFFER ET AL.

Examiner

Fred M. Teskin

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-62,64 and 70-113 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-62,64 and 70-113 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1713

This Office action is responsive to the Amendment and Reply filed December 19, 2006. With entry of the amendment, claims 1-62, 64 and 70-113 are currently pending and under examination.

Applicants' arguments, see page 32, filed December 19, 2006, with respect to the prior art rejections based on Welch et al and Falchi et al have been fully considered and are persuasive. Therefore, these rejections have been withdrawn. Further, the prior art rejection based on WO 00/04061 has been mooted by the cancellation of all claims so rejected.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 62 stands rejected under 35 U.S.C. 103(a) as being unpatentable over US 3470143 to Schrage et al.

The Schrage et al reference discloses a particle form polymerization process wherein highly fluorinated hydrocarbons are used as diluents.

The reference differs from the claimed invention essentially in the use of a

Art Unit: 1713

perfluorinated diluent, rather than one comprising a hydrofluorocarbon (HFC): see the working examples, particularly Example 4, which details the preparation of polypropylene-butene-1 block copolymer by adding a solution of 1-butene in octafluorocyclobutane to a polypropylene reaction product and column 1, lines 31-35 where the patentees' basic invention is said to relate to an innovation in slurry or particle form polymer reactions involving ethylenically unsaturated monomers.

The reference, however, plainly teaches the alternativeness among various species of fluorocarbons, see column 4, lines 33+, where specific HFC's are equated with specific perfluorinated hydrocarbons as examples of acyclic and alicyclic fluorocarbons applicable to the disclosed process. Given an expectation of equivalent performance as diluent, one of ordinary skill would have been inclined to substitute an HFC such as difluoromethane - one of the simplest fluorocarbons mentioned in Schrage et al (col. 4, line 35) - for octafluorocyclobutane in any of the exemplified embodiments. The result would be a process within the scope of the rejected claim.

Applicants' arguments filed December 19, 2006 have been fully considered but are not persuasive of error in the repeated rejection.

Applicants' sole argument, that Schrage et al "fails to disclose, suggest or make obvious an initiator as instantly claimed" (Reply, p. 32), is simply not commensurate in scope with claim 62, which nowhere recites or otherwise includes this subject matter. The claim merely calls for "using a diluent comprising one or more hydrofluorocarbon(s) (HFC's)" in a polymerization process in which particles of polymer are produced. The

Art Unit: 1713

claimed process parameters are either disclosed by Schrage et al or rendered obvious by its teachings as detailed above. Applicants' arguments do not directly address the examiner's stated rationale in support of the finding that substitution of a HFC for octafluorocyclobutane in the polymerization medium of Schrage et al would have been obvious to one having ordinary skill in this art at the time of invention.

Accordingly, the continued rejection of claim 62 is still deemed tenable and therefore must be maintained.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-62, 64 and 70-113 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-7, 9-51, 53 and 59 of copending Application No. 10/538,900. Although the conflicting

Art Unit: 1713

claims are not identical, they are not patentably distinct from each other because they differ merely in matters of scope. That is, the instant claims are generic to a polymerization process and medium as defined by the copending application claims, as amended; therefore, if prior art, the copending claims would form the basis for rejection under Section 102.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.


In view of the new ground of rejection not necessitated by amendment, this action is made non-final.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner F. M. Teskin whose telephone number is (571) 272-1116. The examiner can normally be reached on Monday through Thursday from 7:00 AM - 4:30 PM, and can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached on (571) 272-1114. The appropriate fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FMTeskin/02-21-07


FRED TESKIN
PRIMARY EXAMINER
173